

Complexes of N-thiophosphorylthiourea α -naphthylNHc(S)NHP(S)(OiPr)₂ (HL) with copper(I). crystal structures of HL and Cu(PPh₃)₂L

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Abstract

Reaction of the potassium salt of N-thiophosphorylated thiourea α -naphthylNHC(S)NHP(S)(OiPr)₂ (HL) with Cu(PPh₃)₃I in aqueous EtOH/CH₂Cl₂ leads to the mononuclear complex [Cu(PPh₃)₂L-S,S']. By using copper(I) iodide instead of Cu(PPh₃)₃I, the polynuclear complex [Cu_n(L-S,S')]_n was obtained. The structures of these compounds were investigated by elemental analysis, ¹H and ³¹P{¹H} NMR and IR spectroscopy. The crystal structures of HL and Cu(PPh₃)₂L were determined by singlecrystal X-ray diffraction. © 2009 Wiley-VCH Verlag GmbH & Co. KGaA.

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Keywords

Chelates, Copper, Crystal structure, N-thiophosphorylthiourea, Triphenylphosphane